

EXPRESS MAIL NO. EV343427580US

ABSTRACT OF THE DISCLOSURE

PIPELINE STRUCTURE

A pipeline structure is provided for use in a digital system. The pipeline structure includes stages arranged in a sequence from a first stage for receiving an input of the pipeline structure to a last stage for providing an output of the pipeline structure. At least one intermediate stage is interposed between the first stage and the last stage. The pipeline structure also includes a phase shifting circuit for generating at least one local clock signal for controlling the at least one intermediate stage. The first stage and the last stage are controlled by a main clock signal, the at least one local clock signal is generated from the main clock signal, and the main clock signal and the at least one local clock signal are out of phase. Also provided is a method of operating a pipeline structure that includes stages arranged in a sequence.

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